

## Feed-through terminal block - ST 16-TWIN - 3035328

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Feed-through terminal block, Connection method: Spring-cage connection, Cross section: 0.2 mm<sup>2</sup> - 25 mm<sup>2</sup>, AWG: 24 - 4, Width: 12.2 mm, Color: gray, Mounting type: NS 35/15, NS 35/7,5

### Product Features

- ✓ The ST ...-TWIN three-conductor spring cage terminal blocks are a space-saving alternative to standard feed-through terminal blocks where potential distribution with conductor cross sections of 10 and 16 mm<sup>2</sup> is required
- ✓ The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"
- ✓ Terminal blocks with a nominal cross section of 2.5 or 4 mm<sup>2</sup> can be combined without additional wiring effort using the RB ST... (2,5/4) reducing bridge
- ✓ Ideal as potential distributors in ring feeder systems

### Key commercial data

|                  |               |
|------------------|---------------|
| package_quantity | 25            |
| GTIN             | 4046356100908 |

### Technical data

#### General

|                                         |      |
|-----------------------------------------|------|
| Number of levels                        | 1    |
| Number of connections                   | 3    |
| Color                                   | gray |
| Insulating material                     | PA   |
| Inflammability class according to UL 94 | V0   |

#### General

|                                     |                                                                                                       |
|-------------------------------------|-------------------------------------------------------------------------------------------------------|
| Maximum load current                | 90 A (with 25 mm <sup>2</sup> conductor cross section)                                                |
| Rated surge voltage                 | 8 kV                                                                                                  |
| Pollution degree                    | 3                                                                                                     |
| Surge voltage category              | III                                                                                                   |
| Insulating material group           | I                                                                                                     |
| Connection in acc. with standard    | IEC 60947-7-1                                                                                         |
| Nominal current I <sub>N</sub>      | 76 A (the maximum load current must not be exceeded by the total current of the connected conductors) |
| Nominal voltage U <sub>N</sub>      | 1000 V                                                                                                |
| Open side panel                     | ja                                                                                                    |
| Shock protection test specification | DIN EN 50274 (VDE 0660-514):2002-11                                                                   |

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## Technical data

### General

|                                                                                 |                                                  |
|---------------------------------------------------------------------------------|--------------------------------------------------|
| Back of the hand protection                                                     | guaranteed                                       |
| Surge voltage test setpoint                                                     | 9.8 kV                                           |
| Result of surge voltage test                                                    | Test passed                                      |
| Power frequency withstand voltage setpoint                                      | 2.2 kV                                           |
| Result of power-frequency withstand voltage test                                | Test passed                                      |
| Checking the mechanical stability of terminal points (5 x conductor connection) | Test passed                                      |
| Bending test rotation speed                                                     | 10 rpm                                           |
| Bending test turns                                                              | 135                                              |
| Bending test conductor cross section/weight                                     | 0.2 mm <sup>2</sup> / 0.2 kg                     |
| Bending test conductor cross section/weight                                     | 16 mm <sup>2</sup> / 2.9 kg                      |
| Bending test conductor cross section/weight                                     | 25 mm <sup>2</sup> / 4.5 kg                      |
| Result of bending test                                                          | Test passed                                      |
| Conductor cross section tensile test                                            | 0.2 mm <sup>2</sup>                              |
| Tractive force setpoint                                                         | 10 N                                             |
| Conductor cross section tensile test                                            | 16 mm <sup>2</sup>                               |
| Tractive force setpoint                                                         | 100 N                                            |
| Conductor cross section tensile test                                            | 25 mm <sup>2</sup>                               |
| Tractive force setpoint                                                         | 135 N                                            |
| Tensile test result                                                             | Test passed                                      |
| Tight fit on carrier                                                            | NS 35                                            |
| Setpoint                                                                        | 5 N                                              |
| Result of tight fit test                                                        | Test passed                                      |
| Requirements, voltage drop                                                      | ≤ 3.2 mV                                         |
| Result of voltage drop test                                                     | Test passed                                      |
| Temperature-rise test                                                           | Test passed                                      |
| Conductor cross section short circuit testing                                   | 16 mm <sup>2</sup>                               |
| Short-time current                                                              | 1.92 kA                                          |
| Short circuit stability result                                                  | Test passed                                      |
| Ageing test for screwless modular terminal block temperature cycles             | 192                                              |
| Result of aging test                                                            | Test passed                                      |
| Proof of thermal characteristics (needle flame) effective duration              | 30 s                                             |
| Result of thermal test                                                          | Test passed                                      |
| Test specification, oscillation, broadband noise                                | DIN EN 50155 (VDE 0115-200):2008-03              |
| Test spectrum                                                                   | Service life test category 2, bogie mounted      |
| Test frequency                                                                  | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz |
| ASD level                                                                       | 6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz        |
| Acceleration                                                                    | 3.12 g                                           |
| Test duration per axis                                                          | 5 h                                              |
| Test directions                                                                 | X-, Y- and Z-axis                                |

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## Technical data

### General

|                                                                       |                                     |
|-----------------------------------------------------------------------|-------------------------------------|
| Oscillation, broadband noise test result                              | Test passed                         |
| Test specification, shock test                                        | DIN EN 50155 (VDE 0115-200):2008-03 |
| Shock form                                                            | Half-sine                           |
| Acceleration                                                          | 30 g                                |
| Shock duration                                                        | 18 ms                               |
| Number of shocks per direction                                        | 3                                   |
| Test directions                                                       | X-, Y- and Z-axis (pos. and neg.)   |
| Shock test result                                                     | Test passed                         |
| Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21)) | 125 °C                              |
| Static insulating material application in cold                        | -60 °C                              |

### Dimensions

|                  |          |
|------------------|----------|
| Width            | 12.2 mm  |
| Length           | 107.8 mm |
| Height NS 35/7,5 | 51.5 mm  |
| Height NS 35/15  | 59 mm    |

### Connection data

|                                                                                         |                        |
|-----------------------------------------------------------------------------------------|------------------------|
| Conductor cross section solid min.                                                      | 0.2 mm <sup>2</sup>    |
| Conductor cross section solid max.                                                      | 25 mm <sup>2</sup>     |
| Conductor cross section AWG/kcmil min.                                                  | 24                     |
| Conductor cross section AWG/kcmil max                                                   | 4                      |
| Conductor cross section stranded min.                                                   | 0.2 mm <sup>2</sup>    |
| Conductor cross section stranded max.                                                   | 16 mm <sup>2</sup>     |
| Min. AWG conductor cross section, stranded                                              | 24                     |
| Max. AWG conductor cross section, stranded                                              | 6                      |
| Conductor cross section stranded, with ferrule without plastic sleeve min.              | 0.25 mm <sup>2</sup>   |
| Conductor cross section stranded, with ferrule without plastic sleeve max.              | 16 mm <sup>2</sup>     |
| Conductor cross section stranded, with ferrule with plastic sleeve min.                 | 0.25 mm <sup>2</sup>   |
| Conductor cross section stranded, with ferrule with plastic sleeve max.                 | 16 mm <sup>2</sup>     |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 1.5 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 4 mm <sup>2</sup>      |
| Connection method                                                                       | Spring-cage connection |
| Stripping length                                                                        | 16 mm                  |
| Internal cylindrical gage                                                               | A7                     |

# Feed-through terminal block - ST 16-TWIN - 3035328

## classifications

### eCl@ss

|                   |          |
|-------------------|----------|
| <b>eCl@ss 4.0</b> | 27141121 |
| <b>eCl@ss 4.1</b> | 27141121 |
| <b>eCl@ss 5.0</b> | 27141120 |
| <b>eCl@ss 5.1</b> | 27141120 |
| <b>eCl@ss 6.0</b> | 27141120 |
| <b>eCl@ss 7.0</b> | 27141120 |
| <b>eCl@ss 8.0</b> | 27141120 |

### ETIM

|                 |          |
|-----------------|----------|
| <b>ETIM 2.0</b> | EC000897 |
| <b>ETIM 3.0</b> | EC000897 |
| <b>ETIM 4.0</b> | EC000897 |
| <b>ETIM 5.0</b> | EC000897 |

### UNSPSC

|                      |          |
|----------------------|----------|
| <b>UNSPSC 6.01</b>   | 30211811 |
| <b>UNSPSC 7.0901</b> | 39121410 |
| <b>UNSPSC 11</b>     | 39121410 |
| <b>UNSPSC 12.01</b>  | 39121410 |
| <b>UNSPSC 13.2</b>   | 39121410 |

## approvals

UL Recognized / VDE Zeichengenehmigung / IECEx CB Scheme /

### Approval details

| <b>UL Recognized</b>  |          |          |
|----------------------------------------------------------------------------------------------------------|----------|----------|
| <b>Usegroups</b>                                                                                         | <b>B</b> | <b>C</b> |
| Nominal voltage UN                                                                                       | 600 V    | 600 V    |
| Nominal current IN                                                                                       | 75 A     | 75 A     |
| mm²/AWG/kcmil                                                                                            | 16-4     | 16-4     |

|                                                                                                                   |        |
|-------------------------------------------------------------------------------------------------------------------|--------|
| <b>VDE Zeichengenehmigung</b>  |        |
| Nominal voltage UN                                                                                                | 800 V  |
| Nominal current IN                                                                                                | 76 A   |
| mm²/AWG/kcmil                                                                                                     | 1.5-16 |

# Feed-through terminal block - ST 16-TWIN - 3035328

approvals

|                                                                                                   |        |
|---------------------------------------------------------------------------------------------------|--------|
| IECEE CB Scheme  |        |
| Nominal voltage UN                                                                                | 800 V  |
| Nominal current IN                                                                                | 76 A   |
| mm²/AWG/kcmil                                                                                     | 1.5-16 |

accessories

**End cover**

D-ST 16-TWIN - 3035357



**Screwdriver tools**

SZF 3-1,0X5,5 - 1206612



**Labeled terminal marker**

WST 10/35 - 3030006



ZB 12 CUS - 0824942



# Feed-through terminal block - ST 16-TWIN - 3035328

## accessories

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UC-TM 12 CUS - 0824613



UCT-TM 12 CUS - 0829630



ZBF 12 CUS - 0825018



UC-TMF 12 CUS - 0824670



UCT-TMF 12 CUS - 0829686



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## Documentation

## Feed-through terminal block - ST 16-TWIN - 3035328

accessories

ST-IL - 3039900



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### Bridge

FBS 2-12 - 3005950



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RB ST 16-(2,5/4) - 3030886



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### Mounting rail

NS 35/ 7,5 PERF 2000MM - 0801733



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NS 35/ 7,5 UNPERF 2000MM - 0801681



## Feed-through terminal block - ST 16-TWIN - 3035328

### accessories

NS 35/ 7,5 WH PERF 2000MM - 1204119



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NS 35/ 7,5 WH UNPERF 2000MM - 1204122



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NS 35/ 7,5 AL UNPERF 2000MM - 0801704



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NS 35/ 7,5 ZN PERF 2000MM - 1206421



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NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



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NS 35/ 7,5 CU UNPERF 2000MM - 0801762



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## accessories

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NS 35/ 7,5 CAP - 1206560



## Terminal marking

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ZB 12:UNPRINTED - 0812120



UC-TM 12 - 0819194



UCT-TM 12 - 0829144



ZBF 12:UNBEDRUCKT - 0809735



## Feed-through terminal block - ST 16-TWIN - 3035328

### accessories

UC-TMF 12 - 0819233



UCT-TMF 12 - 0829214



### Test plug terminal block

MPS-MT - 0201744



### Insulating sleeve

MPS-IH WH - 0201663



MPS-IH RD - 0201676



# Feed-through terminal block - ST 16-TWIN - 3035328

## accessories

MPS-IH BU - 0201689



MPS-IH YE - 0201692



MPS-IH GN - 0201702



MPS-IH GY - 0201728



MPS-IH BK - 0201731



## Drawings

## Feed-through terminal block - ST 16-TWIN - 3035328

Circuit diagram



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